FILED IN THE U.S. DISTRICT COURT EASTERN DISTRICT OF WASHINGTON

NOV 26 2008 MARY SUE WILSON 1 Senior Assistant Attorney General MMES R. LARSEN CLERK SPOKANE, WASHINGTON 2 ANDREW A. FITZ THOMAS J. YOUNG 3 ALLYSON ZIPP Assistant Attorneys General PO Box 40117 4 Olympia, WA 98504-0117 Phone: (360) 586-6770 5 6 7 8 UNITED STATES DISTRICT COURT EASTERN DISTRICT OF WASHINGTON 9 CV-08-5085-FVS STATE OF WASHINGTON, NO. CT-10 Plaintiff, 11 STATE OF WASHINGTON'S COMPLAINT FOR DECLARATORY V. AND INJUNCTIVE RELIEF 12 SAMUEL W. BODMAN, Secretary of the United States Department of 13 Energy, and the UNITED STATES DEPARTMENT OF ENERGY, 14 15 Defendants. 16 17 INTRODUCTION T. This is a civil action for declaratory and injunctive relief arising from 1. 18 the United States Department of Energy's failure to meet certain key compliance 19 milestones in a hazardous waste management order (Order) issued by the State of 20 Washington (State) through its Department of Ecology to, and with the consent of, 21 the United States Department of Energy (Energy). The Order, formally known as 22

1	the Hanford Federal Facility Agreement and Consent Order (HFFACO) and
2	commonly known as the "Tri-Party Agreement" or TPA, requires Energy to
3	remedy noncompliance with federal and state hazardous waste laws at Energy's
4	Hanford Nuclear Reservation (Hanford) by, among other things, constructing and
5	operating a Waste Treatment Plant (WTP) to convert waste now stored in an
6	underground tank system and elsewhere into a safer form, and retrieving mixed
7	hazardous and radioactive "high-level waste" from 149 non-compliant, aging, and
8	in some cases already leaking, single-shell tanks (SSTs).
9	2. Energy has missed, or is certain to miss, the following Order
10	compliance milestones related to tank waste treatment:
11	a. M-062-08 (by June 30, 2006, submit a Hanford Tank Waste
12	Supplemental Treatment Technologies Report describing viable path(s)
13	forward to complete treatment of all Hanford tank wastes by 2028).
14	b. M-062-11 (by June 30, 2007, submit final Hanford tank waste
15	treatment baseline).
16	c. M-062-07B (by December 31, 2007, complete assembly of the
17	Low-Activity Waste (LAW) melter; move High-Level Waste (HLW) melter
18	#1 to HLW building).
19	d. M-062-09 (by February 28, 2009, start "cold commissioning"
20	of WTP).
21	e. M-062-10 (by January 31, 2011, complete "hot
22	commissioning" of WTP (i.e., begin waste treatment)).

1	f. M-062-00A (by February 28, 2018, complete tank waste
2	pre-treatment and vitrification (conversion into a glassified form) of no less
3	than 10% by volume and 25% by activity of Hanford's tank waste).
4	g. M-062-00 (by December 31, 2028, complete the treatment of
5	all Hanford tank waste).
6	3. In addition, Energy has missed, or is certain to miss, the following
7	Order compliance milestones related to tank waste retrieval:
8	a. M-045-00B (by September 30, 2006, complete the retrieval of
9 .	waste from sixteen "C-Farm" SSTs);
10	b. M-045-05A (by March 31, 2007, complete waste retrieval from
11	tank S-102); and
12	c. M-045-05 (by September 30, 2018, complete waste retrieval
13	from all Hanford SSTs).
14	4. The State requests a judgment that Energy has violated TPA
15	compliance milestones, as well as the hazardous waste laws and regulations that
16	underlie those milestones. The State seeks permanent injunctive relief requiring
17	Defendants to timely retrieve waste from Hanford's SSTs; to place retrieved waste
18	into storage that complies with the Resource Conservation and Recovery Act
19	(RCRA) and Washington's Hazardous Waste Management Act (HWMA); to
20	timely complete construction of the WTP; to timely treat all of Hanford's
21	high-level tank waste; and to take such other actions as are necessary to mitigate
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threats posed to human health and the environment from historic and potential future releases at the Hanford Site, including historic and potential future releases from the SSTs. In addition, the State seeks civil penalties in the amount of up to \$25,000 per violation per day under RCRA, 42 U.S.C. § 6972(a) (referencing 42 U.S.C. § 6928(a)(3) and (g)), and up to \$10,000 per violation per day under the HWMA, Wash. Rev. Code (RCW) 70.105.080(1); recovery of its attorney's fees and costs; and such other relief as the Court deems appropriate.

II. JURISDICTION

- 5. This action arises under the federal RCRA, 42 U.S.C. § 6972(a)(1)(A), and Washington's HWMA, RCW 70.105.120. This Court has subject matter jurisdiction over claims asserted under RCRA under 42 U.S.C. § 6972(a) and 28 U.S.C. § 1331, as well as under the Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202. Jurisdiction over claims asserted under the HWMA arises under RCW 70.105.120, with this Court having supplemental jurisdiction over such claims under 28 U.S.C. § 1367.
- 6. The United States has waived sovereign immunity for claims asserted under RCRA, and for supplemental claims asserted under state laws respecting the control and abatement of hazardous waste disposal and management. 42 U.S.C. § 6961.
- 7. By letter dated November 24, 2008, the State notified Energy of the violations of RCRA Subchapter III described in this Complaint, and announced the State's intent to file suit, in satisfaction of 42 U.S.C. § 6972(b). The State

provided copies of the notice letter to Samuel Bodman, Secretary of the United States Department of Energy; Ines Triay, Acting Assistant Secretary for Environmental Management, United States Department of Energy; Stephen L. Johnson, Administrator of the United States Environmental Protection Agency; Elin Miller, Regional Administrator of the United States Environmental Protection Agency, Region X; Michael B. Mukasey, Attorney General of the United States; David A. Brockman, Manager, United States Department of Energy, Richland Operations Office; Shirley J. Olinger, Manager, United States Department of Energy, Office of River Protection; and James A. McDevitt, U.S. Attorney.

III. VENUE

8. Venue is proper in this Court pursuant to 28 U.S.C. § 1391(e).

IV. PARTIES

9. Plaintiff is the State of Washington. The State owns the groundwater and surface water of the State, including the groundwater beneath the Hanford Site and the Columbia River, which flows through and is contiguous to the Hanford Site. The State also owns State Route 240, a highway that runs through the Hanford Site. The State owns lands adjoining and in proximity to the Hanford Site that are used by the State and its people for commerce, fishing, recreation, habitat, aesthetics, tourism, and maintaining the cultural identity of the State. The State's waters, highways, and lands are threatened by Energy's treatment, storage, and/or disposal of hazardous and mixed hazardous and radioactive wastes at Hanford in

- violation of the Order, RCRA, and the HWMA. The State has a direct and tangible interest in the health, safety, and welfare of its citizens, and of all lands, air, and waters within the state, which are threatened by Energy's actions.
- 10. The State, through its Department of Ecology (Ecology), is responsible for administering the HWMA. The HWMA and its implementing Dangerous Waste Regulations (Wash. Admin. Code (WAC) 173-303) provide the legal framework for a state hazardous waste program authorized under RCRA by the United States Environmental Protection Agency (EPA). *See* 51 Fed. Reg. 3,782 (1986); 52 Fed. Reg. 35,556 (1987); 55 Fed. Reg. 33,695 (1990); 59 Fed. Reg. 55,322 (1994); and 61 Fed. Reg. 7,736 (1996). To the extent authorized, the HWMA and the Dangerous Waste Regulations stand in lieu of RCRA as the law governing hazardous waste management in Washington. 42 U.S.C. § 6926(b).
- 11. Defendant Samuel Bodman is the Secretary of the United States Department of Energy, and is the chief administrative officer of Energy. Secretary Bodman is the official ultimately responsible for the Energy's compliance at Hanford with environmental laws, including RCRA and the HWMA.
- 12. Defendant United States Department of Energy is an executive department of the United States, created pursuant to 42 U.S.C. § 7131. Energy owns and operates the Hanford Site near Richland, Washington.

V.

The Hanford Site:

13. Energy's Hanford Site covers 586 square miles in south-central Washington. Between 1943 and 1987, the United States produced plutonium at the Hanford Site for use in nuclear weapons. Plutonium production and other activities at Hanford created enormous amounts of radioactive, hazardous, and mixed wastes. Much of this waste remains at the Site today, still awaiting cleanup and/or proper disposal.

FACTS

- 14. The Hanford Site contains over 1,500 identified contaminated sites and structures, which individually and collectively pose substantial risks to human health and the environment. These include 177 underground storage tanks holding approximately 53 million gallons of mixed high-level radioactive and hazardous waste, as described in further detail below.
- 15. The Columbia River flows through or is contiguous to the Hanford Site on the north and east before flowing through the "Tri-Cities" of Richland, Kennewick, and Pasco, Washington. The Columbia River is a water source for municipal, agricultural, and industrial uses in south-central Washington, as well as downstream in Washington and Oregon. The Columbia River supports aquatic life and related biota, including salmon that migrate and breed within and near the Hanford Site.
- 16. The southern boundary of the Hanford Site is contiguous with the city limits of Richland, Washington. The "Tri-Cities" of Richland, Kennewick, and

- Pasco, Washington are home to approximately 170,000 persons (2007 official estimate).
- 17. The Hanford Site itself is significant to the State and its citizens. Large portions of the Hanford Site were designated as the Hanford Reach National Monument in 2000. Both within and beyond the National Monument portion of the Hanford Site, some of the only intact tracts of shrub-steppe habitat in Washington support a variety of plants and wildlife. The Hanford Site, including plants and wildlife within the Hanford Site, is significant to Native American tribes including the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, and the Nez Perce Tribe.

The Hanford Federal Facility Agreement and Consent Order:

18. In 1989, Ecology, EPA, and Energy entered into the Order. Among other things, the Order is a compliance order issued pursuant to RCRA and the HWMA. TPA Article I. The Order establishes numerous milestones (schedules and associated regulatory requirements) for cleanup of the Hanford Site, and for bringing Hanford facilities into compliance with applicable requirements.

Hanford's Tank Waste and Tank Waste Treatment:

19. Energy is storing approximately 53 million gallons of high-level radioactive and hazardous waste (tank waste) at Hanford in 177 underground storage tanks. This tank waste was generated beginning in the 1940s from the reprocessing of spent fuel rods to extract weapons-grade plutonium. All of this waste is "mixed," containing a mixture of hazardous waste and radioactive

material. The hazardous waste component of tank waste is regulated under RCRA and the HWMA.

- 20. Hanford's tank waste includes at least 26 hazardous waste constituents, including heavy metals and volatile organic compounds. All of these constituents are potentially harmful to human health and the environment. In addition, Hanford's tank waste contains at least 46 identified radionuclides. These radionuclides are also potentially harmful to human health and the environment. Once released, some of these radionuclides will persist in the environment for hundreds of thousands of years.
- 21. All of Hanford's tank waste is "land disposal restricted" under RCRA and the HWMA and thus must be treated to specified land disposal restriction standards before disposal. WAC 173-303-140(2)(b) (incorporating by reference 40 C.F.R. § 268.1(b)). However, there is currently no treatment capacity for tank waste at Hanford. The tank waste is instead being stored in violation of the prohibition on storing land disposal restricted waste under the HWMA and RCRA. WAC 173-303-140(2)(b) (incorporating by reference 40 C.F.R. § 268.50).
- 22. The Order is, among other things, a state-enforceable plan for treating all of Hanford's mixed wastes to land disposal restriction standards, as required of Energy under the Federal Facility Compliance Act of 1992 (codified in RCRA), 42 U.S.C. § 6939c(b).
- 23. The Order includes compliance milestones under the M-62 milestone series for creating treatment capacity for Hanford's tank waste through

1	construction and operation of a WTP. The M-62 milestone series also includes
2	compliance milestones for completing treatment of all of Hanford's tank waste by
3	a defined end date.
4	24. Since 1989, the Order's milestone for commencing treatment of
5	Hanford's tank waste (e.g., the current M-062-10) has been re-negotiated and
6	extended three times, each time at Energy's request. As originally negotiated in
7	1989, tank waste treatment was to commence in 1999. In 1994, this start date was
8	moved to 2004. In 1996, the start date was moved to 2008. In 2000, the start date
9	was moved to the current date of 2011 (Order milestone M-062-10).
10	25. Energy has missed, or is certain to miss, the following Order M-062
11	compliance milestones related to tank waste treatment:
12	a. M-062-08 (by June 30, 2006, submit a Hanford Tank Waste
13	Supplemental Treatment Technologies Report describing viable path(s)
14	forward to complete treatment of all Hanford tank wastes by 2028).
15	b. M-062-11 (by June 30, 2007, submit final Hanford tank waste
16	treatment baseline).
17	c. M-062-07B (by December 31, 2007, complete assembly of the
18	LAW melter; move HLW melter #1 to HLW building).
19	d. M-062-09 (by February 28, 2009, start "cold commissioning"
20	of WTP).
21	e. M-062-10 (by January 31, 2011, complete "hot
22	commissioning" of WTP).

1	f. M-062-00A (by February 28, 2018, complete tank waste
2	pre-treatment and vitrification of no less than 10% by volume and 25% by
3	activity of Hanford's tank waste).
4	g. M-062-00 (by December 31, 2028, complete the treatment of
5	all Hanford tank waste).
6	Hanford's Single-Shell Tank System:
7	26. Hanford's approximately 53 million gallons of high-level tank waste
8	is stored in an underground tank system consisting of 177 tanks. Of these
9	177 tanks, 28 are double-shell tanks (DSTs) that comply with RCRA and
10	HWMA standards for hazardous waste tanks. The remaining 149 tanks are SSTs.
11	27. Approximately 30 million gallons of Hanford's tank waste is
12	currently being stored in the 149 SSTs. These tanks were constructed
13	between 1944 and 1964 with an expected operating life of approximately 25 years.
14	These tanks do not comply with RCRA and HWMA standards applicable to
15	tanks that store hazardous waste. Specifically, the SSTs lack structural integrity;
16	lack secondary containment; and lack leak detection, as required by
17	WAC 173-303-400(3) (incorporating by reference 40 C.F.R. § 265.193(a)(3),
18	(b), and (c)).
19	28. At least 67 of the SSTs have already leaked an estimated one million
20	or more gallons of waste to the environment. This leaked waste is mobile. It has
21	already contaminated the vadose zone soils surrounding the tanks. Some of the

leaked tank waste has already reached Hanford's groundwater. This groundwater

- is hydraulically connected to the Columbia River, which flows contiguous to the Hanford Reservation. Left to natural forces, leaked tank waste will continue to migrate into Hanford's groundwater and toward the Columbia River.
- 29. All 149 SSTs have been identified to the State by Energy as "unfit for use" pursuant to WAC 173-303-400(3) (incorporating by reference 40 C.F.R. § 265.196). (Letter dated June 27, 2002, from James E. Rasmussen, Energy Office of River Protection, to Michael Wilson, Department of Ecology.) Energy has not immediately removed these unfit-for-use tanks from service as required under WAC 173-303-400(3) (incorporating by reference 40 C.F.R. § 265.196). Energy has not, within 24 hours after detection of a leak or, if such removal is not possible, at the earliest practicable time, removed as much of the waste from the SSTs as is necessary to prevent further release of hazardous waste to the environment, as required under WAC 173-303-400(3) (incorporating by reference 40 C.F.R. § 265.196(b)(1)). In lieu of providing secondary containment and repair to the SSTs, Energy has not yet closed the unfit-for-use tank system as required under WAC 173-303-400(3) (incorporating by reference 40 C.F.R. § 265.196(e)(1)).
- 30. Pursuant to a consent decree entered in *State of Washington*, *Dep't of Ecology v. United States Dep't of Energy*, No. CT-99-5076-EFS, Energy has successfully removed liquid wastes to a certain volume level and "interim stabilized" the SSTs. However, due to the deteriorating condition of the SSTs, the 30 million gallons of wastes remaining in the SSTs pose a substantial threat to

- escape to the environment and, in turn, threaten human health and the environment through air, soil, groundwater, and surface water exposure pathways. This threat increases the longer tank waste is left in the SSTs.
- 31. The above threat is compounded by a lack of sufficient compliant storage capacity and by delays with the WTP. There is insufficient storage capacity in Hanford's RCRA and HWMA-compliant DST system to allow for the transfer of more than a limited amount of the waste currently stored in the SSTs. Since the Order was negotiated in 1989, Energy's strategy for addressing this situation has been to rely on the prospective future treatment capacity of the WTP to remove waste from the DST and SST systems. Energy has expected that over time, this will free DST capacity to allow for the continued transfer of waste retrieved from the SSTs. Under this strategy, delays with the WTP prolong the continued storage of tank waste in the unfit-for-use SSTs. Furthermore, the longer the timeline for treating Hanford's tank waste becomes extended, the greater the risk that the DSTs may become non-compliant due to aging.
- 32. The Order includes compliance milestones under the M-045 milestone series for retrieving tank waste from certain SSTs and SST groupings by certain dates. The Order includes a compliance milestone under the M-045 milestone series for retrieving tank waste from all SSTs by a defined end date.
- 33. Energy has missed, or is certain to miss, the following Order compliance milestones related to tank waste retrieval:

1		a.	M-045-00B (by September 30, 2006, complete the retrieval of
2	waste	e from	sixteen "C-Farm" SSTs).
3		b.	M-045-05A (by March 31, 2007, complete waste retrieval from
4	tank	S-102).
5		c.	M-045-05 (by September 30, 2018, complete waste retrieval
6	from	all Ha	inford SSTs).
7			VI. CLAIMS FOR RELIEF
8	COUNT O	NE: 1	RCRA Citizen Suit — Violation of Order.
9	34.	The	State realleges paragraphs 1-33 above.
10	35.	42 U	S.C. § 6972(a)(1)(A) authorizes any person to commence a civil
11	action again	nst an	y other person, including the United States, who is alleged to be
12	in violation	n of ar	order or regulation that has become effective pursuant to this
13	chapter.		
14	36.	The	State of Washington, Department of Ecology is a "person" within
15	the meaning	g of th	is statute.
16	37.	The	Hanford Federal Facility Agreement and Consent Order is an
17	"order" tha	t has b	ecome effective pursuant to RCRA.
18	38.	RCR	A-authorized regulations within Washington's Dangerous Waste
19	Regulations	s, WA	C 173-303, are "regulations" that have become effective pursuant
20	to RCRA.		
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1	39. Detendant Energy has violated and currently is in violation of the
2	Order with respect to the following M-062 series tank waste treatment milestones:
3	a. Failing to comply with milestone M-062-08 (by June 30, 2006
4	submit Hanford Tank Waste Supplemental Treatment Technologies Report)
5	b. Failing to comply with milestone M-062-11 (by June 30, 2007
6	submit final Hanford tank waste treatment baseline).
7	c. Failing to comply with milestone M-062-07B (by December
8	31, 2007, complete assembly of the LAW melter; move HLW melter #1 to
9	HLW building).
10	d. Failing to perform sufficient work to assure with reasonable
11.	certainty that Energy will accomplish milestone M-062-09 (by February 28
12	2009, start "cold commissioning" of WTP).
13	e. Failing to perform sufficient work to assure with reasonable
14	certainty that Energy will accomplish milestone M-062-10 (by January 31
15	2011, complete "hot commissioning" of WTP).
16	f. Failing to perform sufficient work to assure with reasonable
17	certainty that Energy will accomplish milestone M-062-00A (by February
18	28, 2018, complete tank waste pre-treatment and vitrification of no less than
19	10% by volume and 25% by activity of Hanford's tank waste).
20	g. Failing to perform sufficient work to assure with reasonable
21	certainty that Energy will accomplish milestone M-062-00 (by December
22	31, 2028, complete treatment of all Hanford tank waste).

40. Defendant Energy has violated and currently is in violation of the
following regulations that underlie the Order's M-062 series tank waste treatment
milestones:
a. Storing land disposal restricted hazardous waste in violation of
the prohibition against storing such waste under WAC 173-303-400(2)(b)
(incorporating by reference 40 C.F.R. § 268.50).
41. Defendant Energy has violated and currently is in violation of the
Order with respect to the following M-045 series SST waste retrieval and closure
milestones:
a. Failing to comply with milestone M-45-00B (by September 30,
2006, complete the retrieval of waste from sixteen C-Farm SSTs).
b. Failing to comply with milestone M-045-05A (by March 31,
2007, complete the retrieval of waste from tank S-102).
c. Failing to perform sufficient work to assure with reasonable
certainty that Energy will accomplish milestone M-045-05 (by September
30, 2018, retrieve waste from all SSTs).
42. Defendant Energy has violated and currently is in violation of the
following regulations that underlie the Order's M-045 series tank waste retrieval
milestones:
a. Storing hazardous waste in tank systems that lack structural
integrity as required by WAC 173-303-400(3) (incorporating by reference
40 C.F.R. § 265.193(a)(3)).

1	b. Storing hazardous waste in tank systems that lack secondary
2	containment as required by WAC 173-303-400(3) (incorporating by
3	reference 40 C.F.R. § 265.193(b)).
4	c. Storing hazardous waste in tank systems that lack leak
5	detection as required by WAC 173-303-400(3) (incorporating by reference
6	40 C.F.R. § 265.193(c)).
7	d. Failing to remove unfit-for-use tanks from service immediately
8	as required under WAC 173-303-400(3) (incorporating by reference
9	40 C.F.R. § 265.196).
10	e. Failing to, within 24 hours after detection of a leak from
11	an SST or, if such removal is not possible, at the earliest practicable
12	time, remove as much of the waste from the SSTs as is necessary to
13	prevent further release of hazardous waste to the environment, as
14	required under WAC 173-303-400(3) (incorporating by reference 40 C.F.R.
15	§ 265.196(b)(1)).
16	f. In lieu of providing secondary containment and repair to
17	unfit-for-use SSTs, failing to close an unfit-for-use tank system as
18	required under WAC 173-303-400(3) (incorporating by reference 40 C.F.R.
19	§ 265.196(e)(1)).
20	43. Under 42 U.S.C. § 6972(a)(1), this Court has jurisdiction to enforce
21	the Order and the regulations that underlie the Order, as well as to order Energy to
22	take such other action as may be necessary.

COUNT TWO: Hazardous Waste Management Act. The State realleges paragraphs 1-43 above. 44. Ecology issued the Order under authority granted by RCW 45. The Order is designed to bring Hanford's stored tank waste and 70.105.095. Hanford's tanks into compliance with the HWMA. 46. Defendants are in violation of the Order. Defendants are in violation of regulations that underlie the Order. 47. 48. Under RCW 70.105.120, the Attorney General is authorized to bring such injunctive, declaratory, or other actions to enforce any requirement of this chapter. VII. PRAYER FOR RELIEF WHEREFORE, Plaintiff respectfully requests that this Court: 49. Enter judgment that Defendants have violated Order compliance milestones, as well as the hazardous waste laws and regulations that underlie those milestones. 50. Grant permanent injunctive relief requiring Defendant Energy to timely retrieve waste from Hanford's SSTs and place it into RCRA and HWMA compliant storage; to timely complete construction of the WTP; to timely treat all of Hanford's high-level tank waste; and to take such other actions as are necessary to mitigate threats posed to human health and the environment from historic and

potential future releases at the Hanford Site, including historic and potential future

releases from the SSTs.

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1	51. Levy civil penalties for the above violations in the amount of up to
2	\$25,000 per violation per day under RCRA, 42 U.S.C. § 6972(a) (referencing
3	42 U.S.C. § 6928(a)(3) and (g)), and up to \$10,000 per violation per day under the
4	HWMA, RCW 70.105.080(1);
5	52. Award attorney's fees and costs to the Plaintiff; and
6	53. Grant such other relief as the Court deems appropriate.
7	DATED this Aday of November 2008.
8	ROBERT M. MCKENNA
9	Attorney General
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11	MARY SUE WILSON, WSBA #19257
12	Senior Assistant Attorney General ANDREW A. FITZ, WSBA #22169
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